



**Charlotte
Gaudin**
PhD

**Microbiologist in plant-
microorganism interactions**

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🗨 [LinkedIn](#) [Orcid](#)

🗨 French (native) & English (fluent)



EDUCATIONS & EXPERIENCES

- ❖ **Postdoc – FUN-PEPs (UA-INRAE co-funding)** | BIDEFI team, IRHS of Angers | 10.2025-ongoing |
Project: “Functional characterization of a new family of cysteine-rich PEPTides”.
Skills: CRISPR-Cas9 knock-out, cloning, molecular biology, microbiology (bacteria & fungi), optical microscopy
- ❖ **Postdoc – INNO-TOM (BMBF funding)** | Lahaye’s group, ZMBP Tübingen | 11.2024-03.2025 |
Project: “Creating novel tomato cis- and intragenic varieties resistant to *Xanthomonas*”.
Skills: Mutant characterization, teaching, PI recruitment.
- ❖ **PhD – CRISTAL (Pays de la Loire-INRAE co-funding)** | EmerSys team, IRHS of Angers | 2020-2023 |
Thesis: “TALE diversity in *Xanthomonas* bean pathogens and bean resistance mechanisms against common bacterial blight of bean”.
Skills: Transcriptomic analysis (RNAseq), image analysis (Ilastik, ImageJ), bacterial genomics and molecular phylogeny, optical microscopy, science vulgarization...
Courses: RNAseq & Ilastik analysis, qPCR methodology, biostatistics with R, ethics & reproducible research, scientific writing & illustration...
- ❖ **M2 Internship** | EmerSys team, IRHS of Angers | January-July 2020 |
Project: “Finding Common bean Resistance genes using Transcription Activator-Like effectors”
Skills: Cloning (Golden TAL technology), molecular biology, bacteriology, designing dTALE with bioinformatic
- ❖ **M1 Internship** | EmerSys team, IRHS of Angers | April-July 2019 |
Project: “Study of the effector TAL23A role on the *ail1* gene in the interaction between Common bean/*Xanthomonas*”
Skills: Cloning (Golden TAL technology), bacteriology, pathogenicity test, data analysis (R)
- ❖ **Master’s degree - fundamental and applied microbiology** | University of Rennes 1 | 2018-2020 |
Modules: Microbial Physiology and Metabolism, Microbial Pathogenicity, Bacterial Genetics and Genomics, Bacterial interactions, Microorganism Ecosystem and Ecology, Statistics, Bioinformatics...
- ❖ **BSc in Biology - Cellular, Molecular Biology and Physiology** | University of Angers | 2015-2018 |
Modules: Microbiology, Plant & Animal Physiology, Statistics, Bioinformatics...
One semester at the [University College of Dublin](#) (Ireland)
Modules: English, Microbial Pathogenicity, Genetic & Molecular basis of disease, Advanced Cell Biology...



AWARDS & RECOGNITION

Doctoral students' days SFR Quasav best presentation – 2022

Article [featured](#) in Journal of Experimental Biology – 2025



PUBLICATIONS

Published

Gaudin C, Prèveaux A, Aubineau N, Le Goff D, Jacques MA, Chen N WG. A dTALE approach demonstrates that induction of common bean *OVATE Family Protein 7* promotes resistance to common bacterial blight. *Journal of Experimental Botany*, Volume 76, Issue 2, 10 January 2025, Pages 607–620. doi: [10.1093/jxb/erae433](https://doi.org/10.1093/jxb/erae433).

Gaudin C, Gihaut C, Briand M, Marques ASA, Ferreira MAS V, Jacques MA, Chen N WG. Whole Genome Sequences of Nine *Xanthomonas* Strains Responsible for Common Bacterial Blight of Bean. *Microbiol Resour Announc*. 2023 Mar 16;12(3):e0125922. doi: [10.1128/mra.01259-22](https://doi.org/10.1128/mra.01259-22).



CONFERENCE ACTIVITIES

16^e Plants and Bacteria Meetings 20-24 March 2023 - oral presentation, Aussois France

JDD SFR Quasav 17 November 2022 - oral presentation, Angers France

Xanthomonas Genomics Conference 13-17 June 2022 - poster presentation, Tampa Florida

JDD ED-EGAAL 30 June & 01 July 2022 - oral presentation, Rennes France

French Network on *Xanthomonads* - oral presentations (26-27 May 2021 digital, 22-24 November 2021 Piriac-sur-Mer, 28-30 September 2022 Lacapelle-Biron)

EuroXanth 29-30 June 2021 - no presentation, digital



SUPERVISION & TEACHING

Supervision of two 1st year Master's students | 2025 | 2 weeks |

Master & Bachelor practical courses on molecular biology techniques at Tübingen University | 2025 |

Supervision of a DUT (two-year technical degree) student | 2022 | 4 months |



SCIENTIFIC OUTREACH

Orientation day for the [DigiFilles](#) operation | 9th grade | 2026 |

Contribution to the book "[Comme au labo](#)" | 2024 |

Creation of a game and rewards on apple tree pests for the IRHS booth of the Fête de la Science | 2023 |

Explaining my PhD subject in a 2-minute [video](#) for the JDD SFR Quasav | 2023 |

Supervision of a [Savanturiers](#) project on fungi | 1st grade & kindergarten | 2022 |

Introduction to the microbe world through experiments, quiz and discussions | 4th grade | 2018 |



REFERENCES

PORQUIER Antoine (IRHS Angers, France) antoine.porquier@inrae.fr

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FOUCHER Justine (GEVES Angers, France) justine.foucher@geves.fr